Elytra, Tokyo, **32** (1): 79–84, May 31, 2004

A Remarkable New Species of the Genus *Micropeplus* (Coleoptera, Staphylinidae) from Hokkaido, Northeast Japan

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Abstract A remarkable new species of the staphylinid genus *Micropeplus* is described under the name of *Micropeplus horii*. It is obtained by using a truck trap on the Mikuni Pass of central Hokkaido, Northeast Japan.

The micropepline beetles form a characteristic group in the family Staphylinidae and are readily distinguished from the other members of the family by a combination of the following characters: antennae nine-segmented, pronotum excavated under the lateral sides for reception of the antennae, and elytra and abdomen provided with remarkable costae on the surface.

Seven species of *Micropeplus* have hitherto been reported from Japan excluding the Ryukyus by Sharp (1874), Sawada (1964), Watanabe and Shibata (1965), and Watanabe (1975, 1990). Through the courtesy of Mr. Shigehisa Hori, I have recently had an opportunity to examine a series of specimens of an interesting species of the genus, which were obtained by using a track trap on the Mikuni Pass of central Hokkaido, Northeast Japan. It seems to belong to the group of *M. tesserula* from Europa, Canada and North America in having each elytron provided with four longitudinal costae and interspaces of the costae impunctate. However, this species does not agree with any of the other members of the group in the remarkably convex and strongly transverse body, and somewhat asymmetrical male genital organ. It must be a new species, whose description will be geven in the present paper.

Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi Uéno, Visiting Professor at Tokyo University of Agriculture, for his kind advice on the present study. My hearty thanks are also due to Mr. Shigehisa Hori, Historical Museum of Hokkaido, for his kindness in providing me with the invaluable specimens used in the present study, and to Mr. Koji Arai, Ranzan-machi, Saitama, for his assistance in drawing the habitus illustration inserted in this paper.

Micropeplus horii Y. WATANABE, sp. nov.

[Japanese name: Hori-sesujichibi-hanekakushi]

(Figs. 1–5)

Body length: 1.3–1.4mm (from front margin of head to anal end); 1.0–1.1 mm from front margin of head to elytral apices).

Body oval and strongly convex. Colour reddish brown, moderately shining except for subopaque head and pronotum, with head blackish and 3rd to 8th antennal segments blackish brown.

Male. Head subtriangular and a little broader across compound eyes than long (width/length=1.15); clypeo-frontal part produced forwards and narrowed anteriad, gently rounded and finely bordered on latero-anterior margin; surface flattened and impunctate, though covered with distinct coriaceous ground sculpture; disc uneven, provided with a short oblique elevation on each side of the middle in posterior two-thirds; lateral sides arcuate and distinctly elevated, though the elevation is abbreviated at the anterior part which is slightly emarginate at the middle, surface impunctate and similarly coriaceous to clypeo-frontal part; compound eyes prominent and coarsely faceted. Antennae relatively short, not reaching the middle of pronotum, usually receding onto the underside of pronotum for their reception, all the segments polished except for setose apical part of apicalmost segment; 1st segment enlarged and dilated apicad, a little longer than broad (length/width=1.10), 2nd abruptly narrowed in apical half, somewhat longer than broad (length/width=1.07), slightly shorter (2nd/1st=0.91) and a little narrower (2nd/1st=0.93) than 1st, 3rd elongate, about 1.5 times as long as broad though somewhat shorter (3rd/2nd=0.83) and distinctly narrower (3rd/2nd=0.54) than 2nd, 4th a little longer than broad (length/width=1.33), slightly shorter (4th/3rd=0.80) than though as broad as 3rd, 5th a little longer than broad (length/width=1.38), but slightly shorter (5th/4th=0.90) and narrower (5th/4th=0.87) than 4th, 6th somewhat longer than broad (length/width=1.23), slightly shorter (6th/5th=0.89) than though as broad as 4th, 7th almost as long as broad but distinctly shorter (7th/6th=0.81) and slightly narrower (7th/6th=0.92) than 6th, 8th somewhat transverse (width/length=1.25), slightly shorter (8th/7th=0.92) though somewhat broader (8th/7th=1.25) than 7th, 9th the largest and globular, 1.5 times as long as broad, five times as long as and much broader (9th/8th=2.67) than 8th, broadly rounded at the apex.

Pronotum subtrapezoidal and strongly convex at the middle, distinctly transverse (width/length=1.86) and much broader than head (pronotum/head=2.27), widest at the base and strongly narrowed anteriad, lateral margins each almost straight though slightly emarginate in anterior half, anterior margin emarginate at the middle, posterior margin weakly bisinuate, somewhat broadly produced backwards and broadly rounded at the middle, anterior angles more or less angulate, posterior ones nearly rectangular though blunt at the corners; lateral areas each rather broadly explanate, provided with a shallow depression behind the middle; surface impunctate though covered with similar ground sculpture to that on head; median part provided with four cells enclosed by

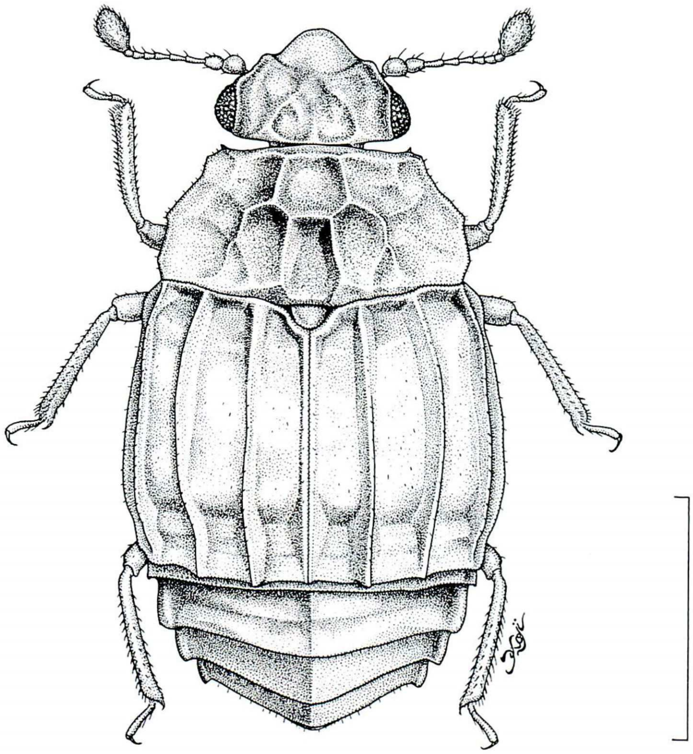


Fig. 1. *Micropeplus horii* Y. WATANABE, sp. nov., ♂, from the Mikuni Pass of central Hokkaido, Japan. Scale: 0.5 mm.

costae, one at the middle in anterior half and the remaining three in posterior half, surface of each cell distinctly depressed above and covered with ground sculpture as in lateral areas; lateral cells not enclosed by distinct costae. Scutellum subtriangular, finely coriaceous on the surface. Elytra subquadrate, strongly convex medially and apparently transverse (width/length=1.29), a little longer (elytra/pronotum=1.19) and distinctly broader (elytra/pronotum=1.71) than pronotum, widest behind the middle and somewhat narrowed both anteriad and posteriad, abruptly and transversely depressed in posterior fourth along posterior margin, each elytron provided with four longitudinal costae, one sutural, two discal and one humeral, sutural costa less strong than the other costae, first discal costa nearly straight, second one gently arcuate outwards, all the costae extending through the whole length, each interspace of the costae impunctate though covered with coriaceous ground sculpture as on pronotum; epipleural costa strongly and arcuately raised, pseudepipleural costa absent, interspace between epipleural costa and lateral margin much narrower than the interspace between epipleural costa and humeral costa, and covered with ground sculpture as on the other interspaces. Legs relatively short; tarsi three-segmented, 1st and 2nd segments each very

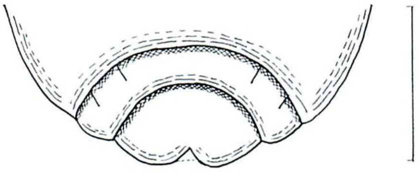


Fig. 2. Last two abdominal sternites in male of *Micropeplus horii* Y. WATANABE, sp. nov. Scale: 0.25 mm.

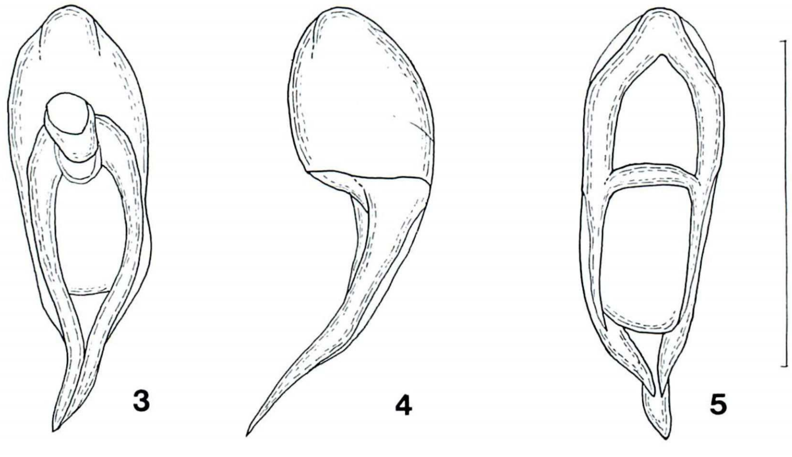
short, 3rd much longer than the two precedings together.

Abdomen short, gradually narrowed towards apical end; surface of each tergite impunctate though covered with similar coriaceous ground sculpture to that on elytra, basal four visible tergites each transversely depressed in basal half and provided with a median longitudinal costa which extends to the posterior margin, except for that of 4th visible tergite much finer than those of other tergites and abbreviated near the middle; mid-lateral longitudinal costae obscure; last sternite minutely and semicircularly excised at the middle of posterior margin.

Genital organ somewhat spindle-shaped, asymmetrical and moderately sclerotized. Median lobe relatively broad, widest at basal fourth and more gradually narrowed apicad than basad, broadly rounded at apical margin; parameres elongate and longer than median lobe, fused to each other and curved to the right side in apical fourth.

Female. Similar in general appearance to male, but different from it in the normal last abdominal sternite.

Type series. Holotype: ♂, allotype: ♀, Japan, Hokkaido, Kamikawa-Horokanai T., Mikuni Pass, 29–VI–2002, Shigehisa HORI leg. Paratypes: 5♂♂, 4♀♀, same data as



Figs. 3–5. Male genital organ of *Micropeplus horii* Y. WATANABE, sp. nov.; dorsal view (3), lateral view (4), and ventral view (5). Scale: 0.25 mm.

for the holotype. All the specimens of the type series are deposited in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture, except for a pair of the paratypes in the Historical Museum of Hokkaido, Sapporo.

Distribution. Japan (Hokkaido).

Remarks. The present new species is similar in body size and general appearance to *M. tesserula* CURTIS (1828, p. 204; cf. CAMPBELL, 1968, p. 232, figs. 1, 20) known from Europe, Canada and North America, but is distinguishable from it by the following points: head provided with a pair of oblique elevations at the middle in posterior two-thirds; pronotum widest at the base; elytra much more strongly depressed in posterior fourth along posterior margin, 2nd discal costa distinctly arcuate outwards in median part; abdominal tergites each provided with a longitudinal median costa though the mid-lateral costa is obscure; male genital organ asymmetrical and curved to the right side in apical fourth.

Bionomics. All the type specimens were obtained on the Mikuni Pass by using a truck trap from 9 a.m. to 3 p.m. The pass is located between Kamikawa and Horokanai Towns in central Hokkaido, Northeast Japan.

Etymology. The present new species is named after Mr. Shigehisa HORI, who kindly supplied me with the specimens of the type series of this interesting species.

要　約

渡辺泰明：北海道で発見されたセスジチビハネカクシ属（甲虫目ハネカクシ科）の1新種. —— セスジチビハネカクシ属は，触角が9節で，前胸背板には隆条で囲まれた小室が存在し，翅鞘と腹部がそれぞれ顕著な隆条を具えることなどによって，他のハネカクシ類から容易に区別される．現在まで，日本からは琉球を除いた地域から7種が報告されている．最近，私は，堀繁久氏により北海道上川町三国峠におけるトラックトラップで採集された，本属の1種を検討する機会を得た．この種は各翅鞘に4隆条を有することと，これらの隆条間が点刻されないことなどの点で，ヨーロッパ，カナダ，北米に分布している *M. tesserula* に近縁の種と思われた．しかし体が強く膨隆し，翅鞘は顕著に横位で，また雄交尾器の形態が明らかに *M. tesserula* のものとは異なるので新種と認め，ホリセスジチビハネカクシ *Micropeplus horii* と命名・記載した．

Errata and Corrigenda

In the Elytra, **31** (2): p. 399: in the figure caption, for *Eusphalerum bonjusanum* read *Eusphalerum bonjuense*. p. 402: line 8, for *Eusphalerum bonjusanum* read *Eusphalerum bonjuense*.

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Elytra, Tokyo, **32** (1): 84, May 31, 2004

New Records of Staphylinid Beetles (Coleoptera, Staphylinidae) from the Island of Shôdo-shima in Kagawa Prefecture, West Japan

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Ten species of staphylinids, except for pselaphine beetles, have hitherto been recorded from the Island of Shôdo-shima in Kagawa Prefecture by SATÔ (1955) and HAYASHI (1956). The second author had an opportunity of making a faunal investigation of ground beetles on the Island of Shôdo-shima in the autumn of 1997. He was able to obtain three staphylinid species, two of which are new to the fauna of the island, as recorded below.

1. *Hesperus tiro* (SHARP)
   5♂♂, 8♀♀, Kanka-kei, Uchinomi-chô, Shôzu-gun, 28~29–X–1997.
2. *Lordithon* (*Bolitobus*) *irregularis* (WEISE)
   1♀, Same data as above.

We thank Mr. Takeshi MIKI, Takamatsu, for giving useful information.

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